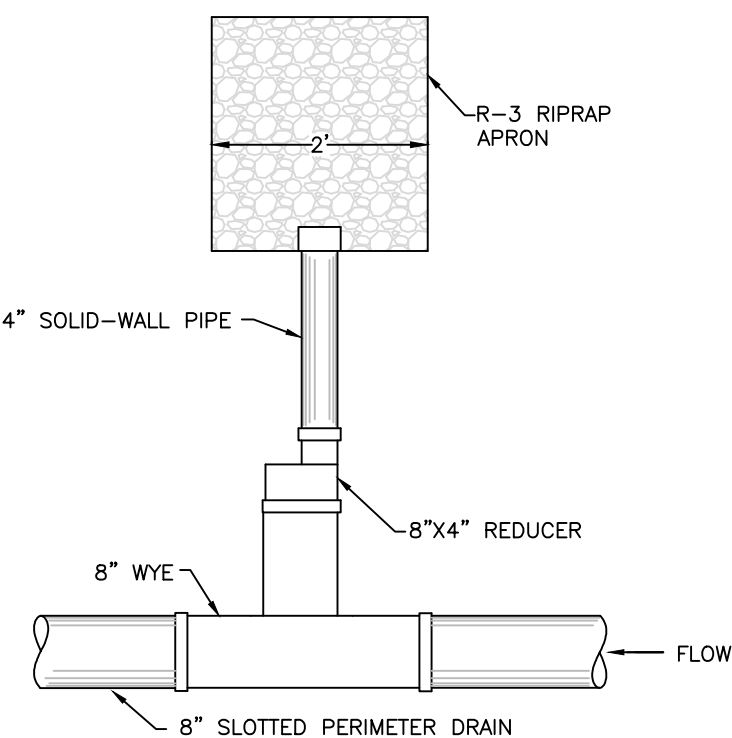


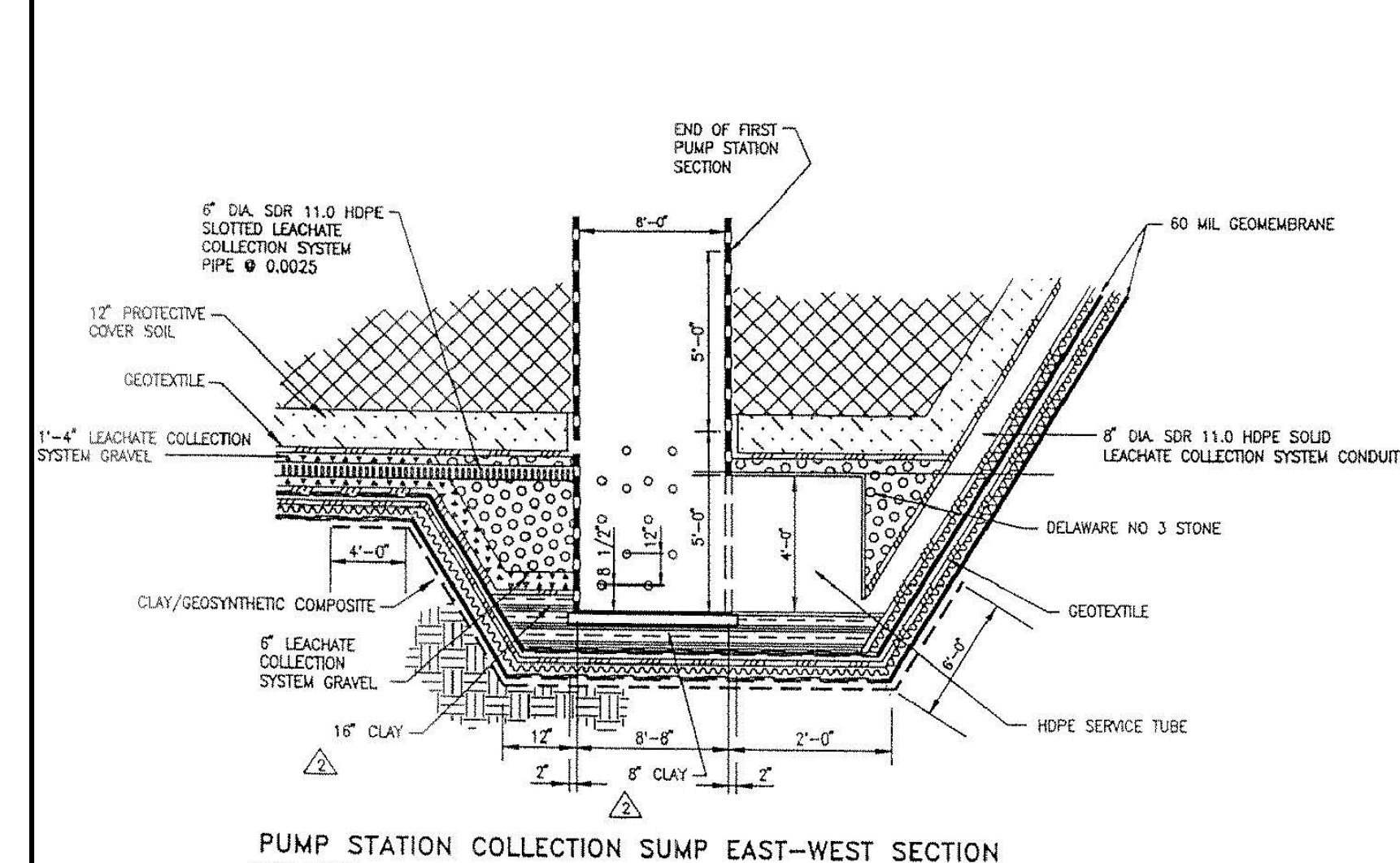
Aug 24, 2005 - 10:15:37 DWG Name: K:\32642421-Miscs\_RR\Working\_Dwg\CAD Details.dwg Updated By: amahmed0

REVISIONS				
NO.	BY	CHKD	DATE	DESCRIPTION
1	SMR	JAC	08/30/10	REVISED TO ADDRESS FINAL DNR/EC COMMENTS
2	SMR	JAC	09/29/08	REVISED ROUND SUMP DETAILS TO ADDRESS DNR/EC COMMENTS
3	SMR	CKW	10/30/07	REVISED TO ADDRESS DNR/EC COMMENTS
4	SMR	JAC	02/02/06	SUBMITTED WITH CLOSURE PLAN FOR DNR/EC REVIEW

WARNINGS	
	IF THE SEAL ON THIS PLAN IS NOT RED OR RAISED THEN THIS PLAN MAY HAVE BEEN ALTERED AND RECORDED. ORIGINAL SEALS ARE STAMPED IN RED INK OR EMBOSSED WITH A CRIMPING SEAL.
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	

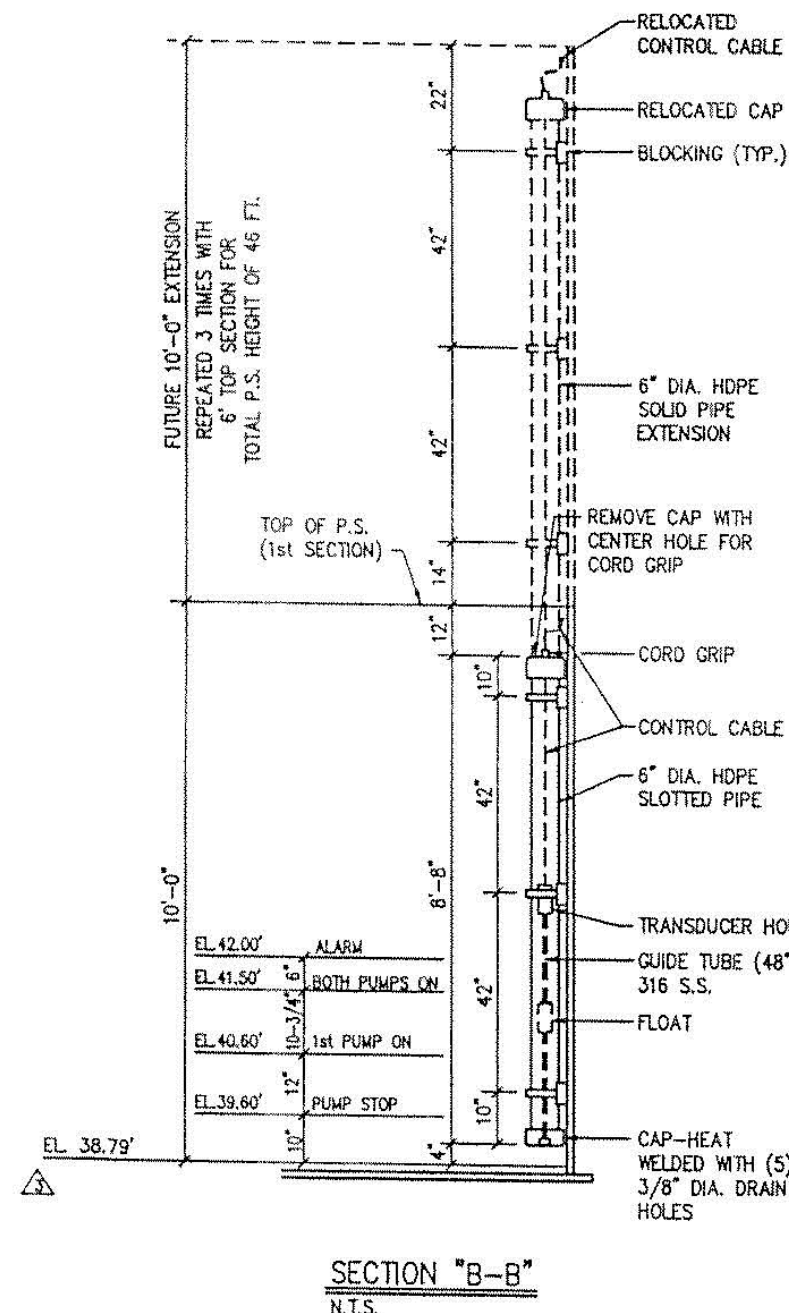


PERIMETER TRENCH DRAIN LATERAL DETAIL  
N.T.S.

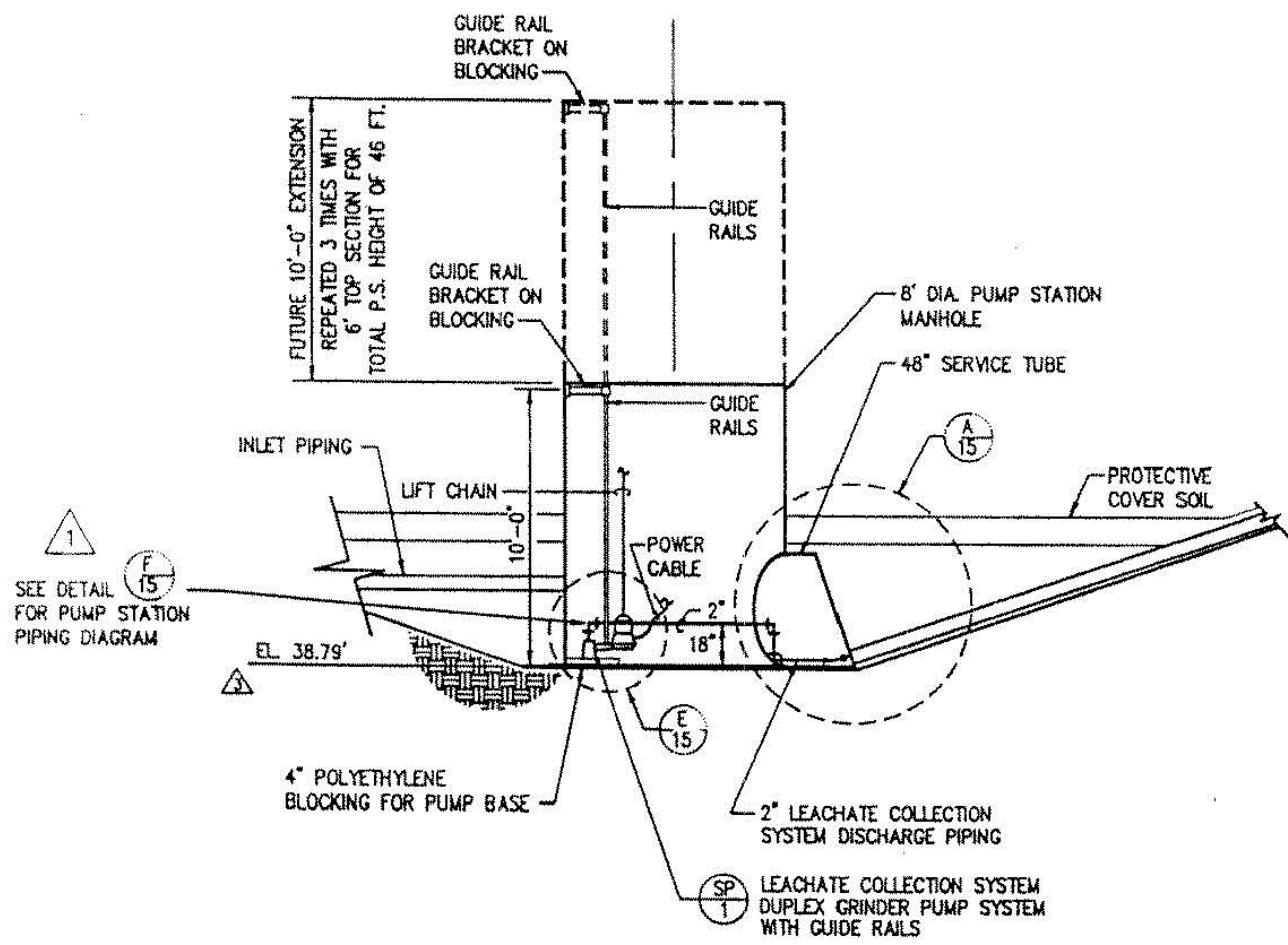


- NOTES:
1. THE FIRST ROW OF PUMP STATION PENETRATIONS IS CENTERED AT A HEIGHT OF 8 1/2" ABOVE THE BOTTOM OF THE LOWEST PUMP STATION SECTION. HOLES ARE 1" DIA., SPACED 3/4" APART FOR A TOTAL OF 12 HOLES PER ROW. EACH SUBSEQUENT ROW IS SPACED 1 1/2" ABOVE THE LOWER ROW. HOLE PATTERN ROTATES 15° WITH EACH ROW.
  2. FOR INFORMATION NOT SHOWN, SEE

LEACHATE COLLECTION MANHOLE/PUMP STATION  
EXISTING CONDITIONS  
N.T.S.

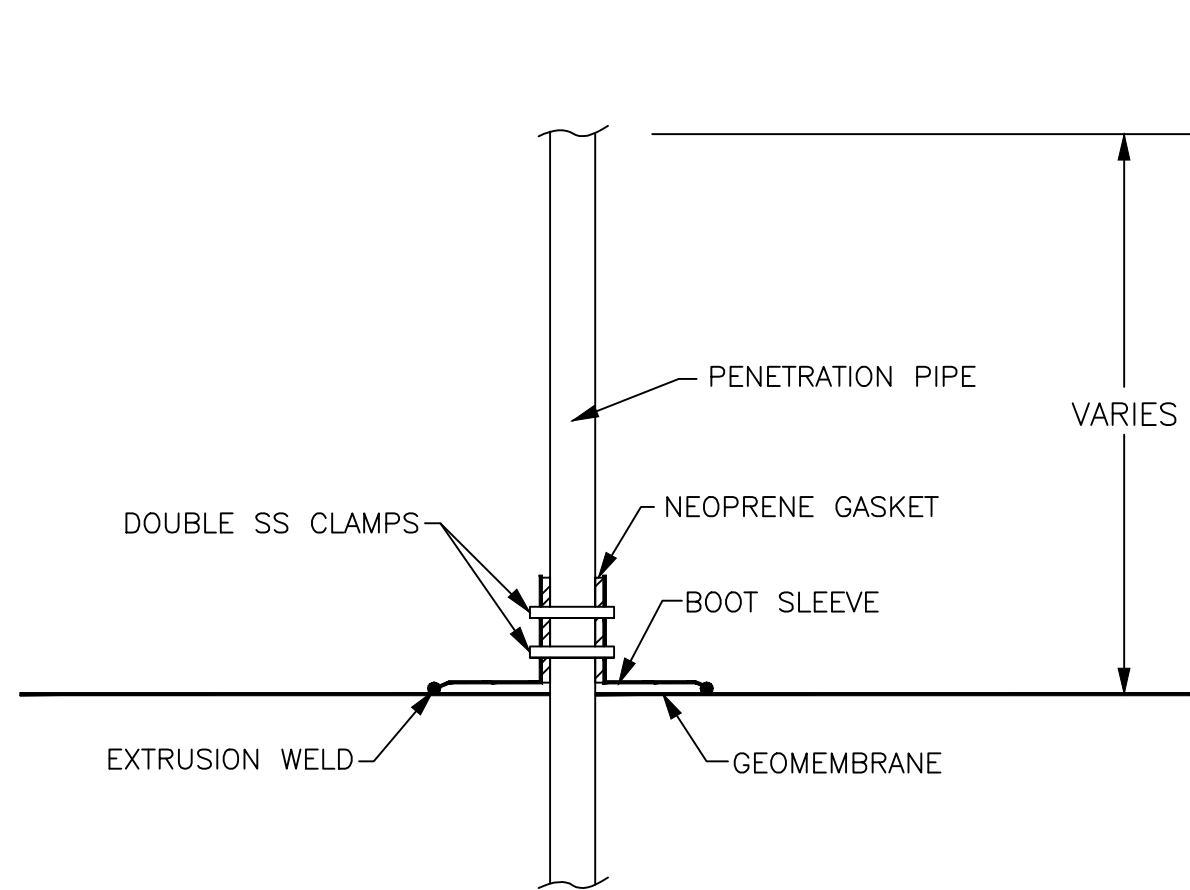


LEACHATE COLLECTION MANHOLE/PUMP STATION  
PROPOSED EXTENSION DETAILS  
N.T.S.



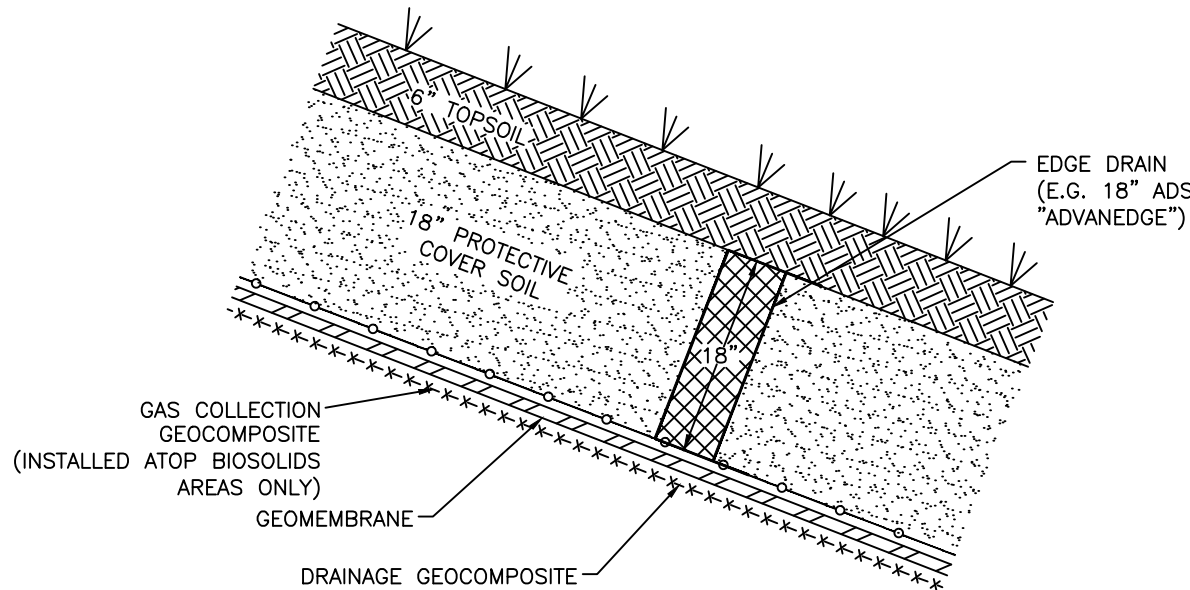
- NOTES:
1. 3/8" THICK STEEL PLATE (8'-0" x 9'-0") SHALL BE GALVANIZED AND COVERED ON EACH SIDE WITH 100MIL HDPE, EXTRUSION OR FUSION WELDED AT THE SEAMS, TO COMPLETELY SEAL THE STEEL PLATE.
  2. AN ADDITIONAL MINIMUM 100MIL HDPE MEMBRANE SHOULD BE WELDED TO BOTTOM OF PUMP STATION MANHOLE.
  3. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PUMP STATION MANHOLE LOCATION ON THE STEEL PLATE, ± 1 INCH TOLERANCE, DURING BACKFILL ACTIVITIES.
  4. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING A GEOTEXTILE 12 INCHES IN LENGTH BETWEEN PROTECTIVE COVER SOIL AND PUMP STATION AROUND THE PERIMETER OF THE PUMP STATION.

PUMP STATION COLLECTION SUMP NORTH-SOUTH SECTION

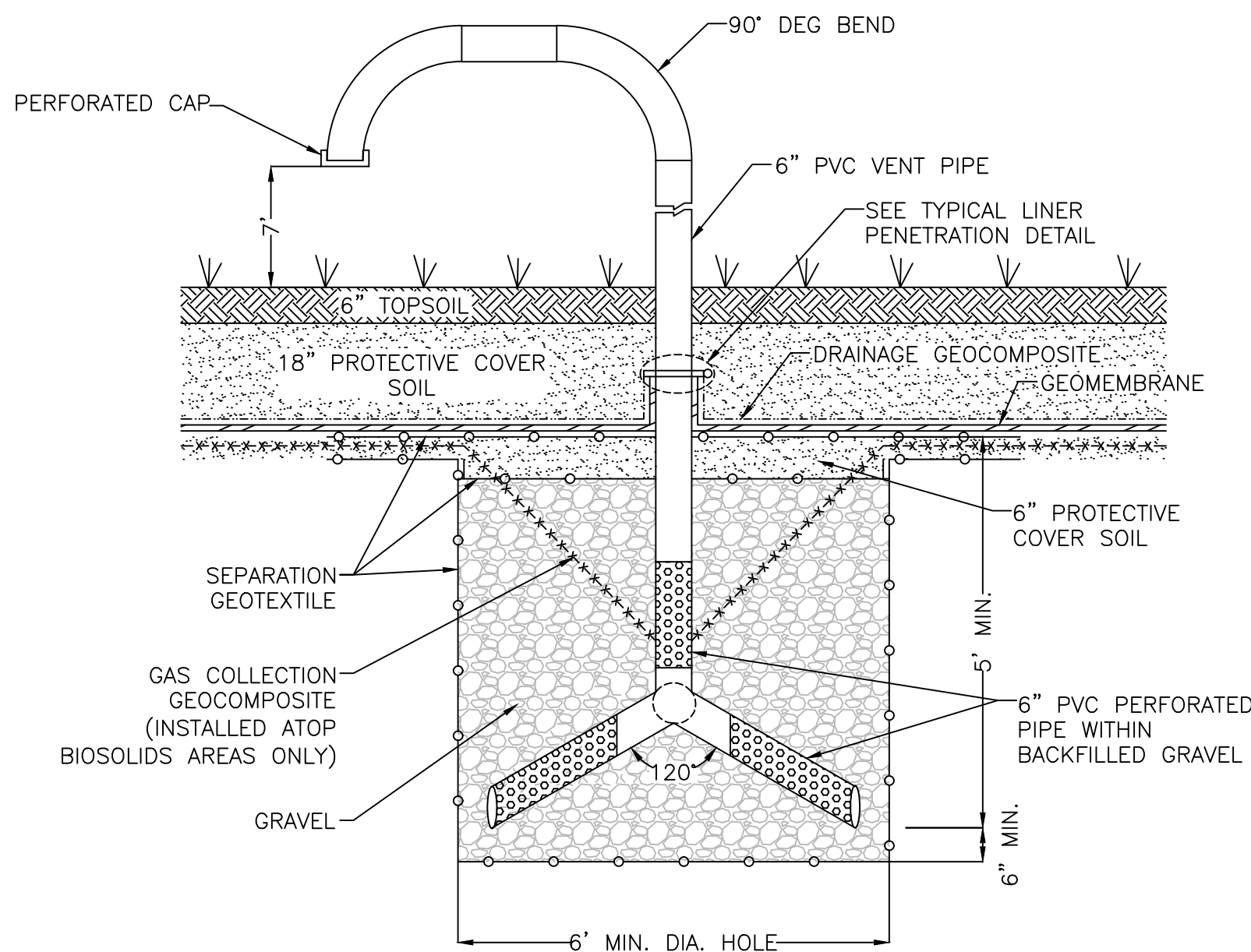


- NOTES:
1. UTILIZED FOR GAS VENTS, LEACHATE SUMPS AND ANY OTHER PIPE PENETRATIONS.

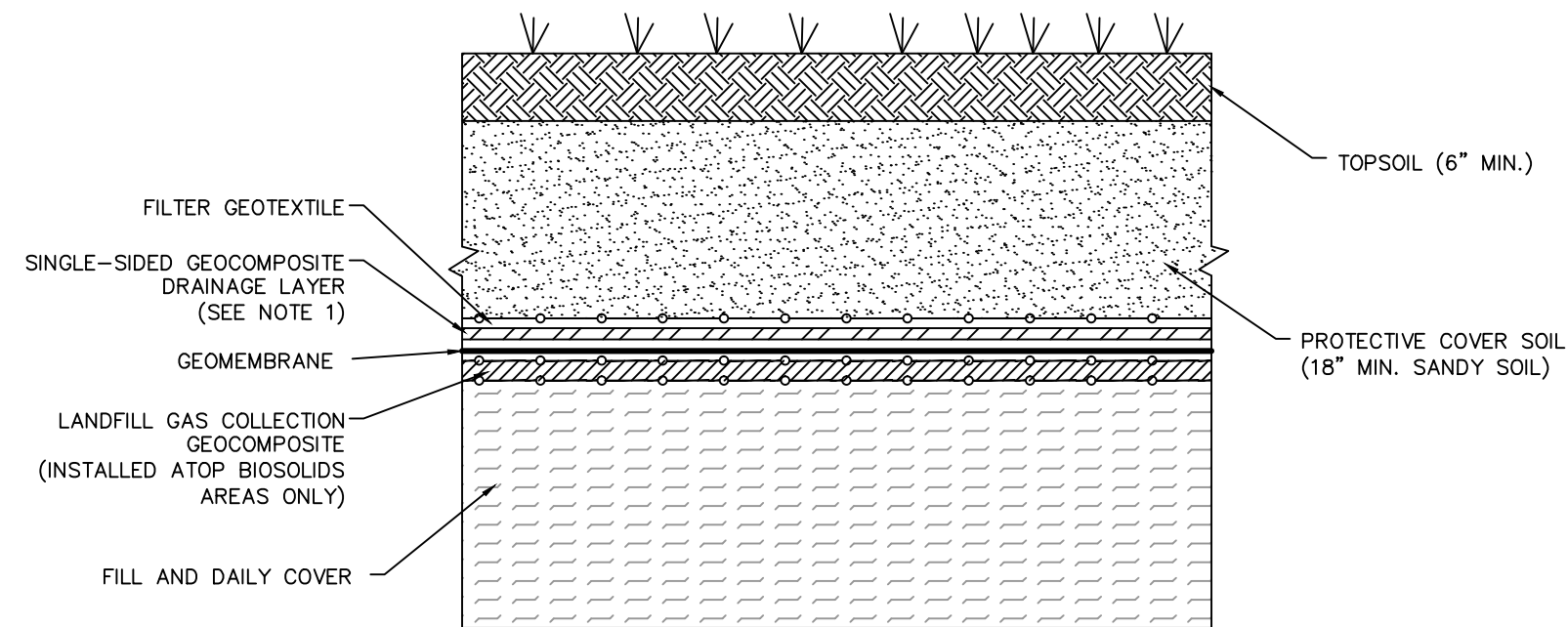
TYPICAL LINER PENETRATION DETAIL  
N.T.S.



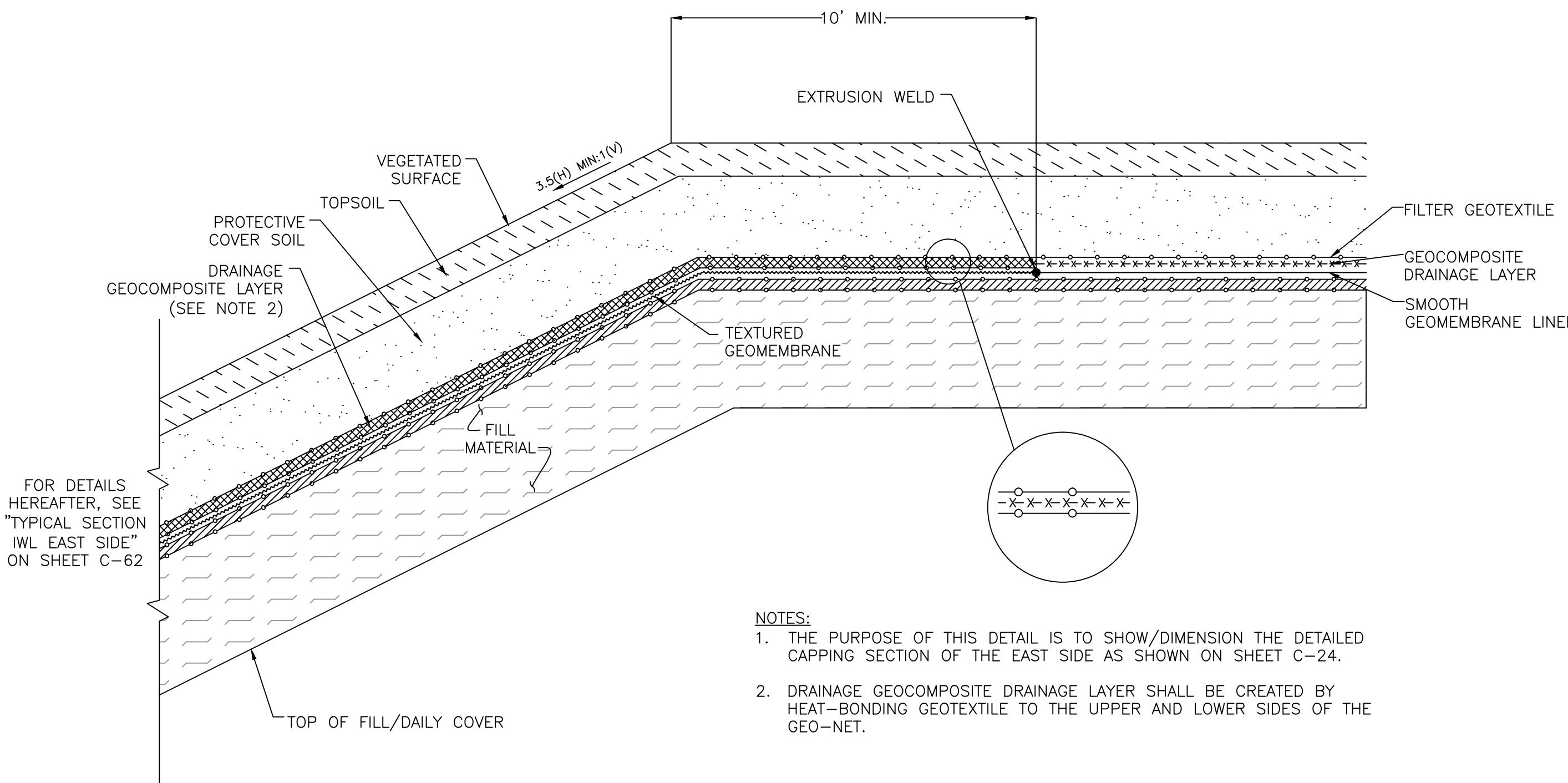
TYPICAL COVER SYSTEM DRAIN  
N.T.S.



TYPICAL GAS VENT DETAIL  
N.T.S.



TYPICAL COVER SYSTEM DETAIL  
N.T.S.



- NOTES:
1. THE PURPOSE OF THIS DETAIL IS TO SHOW/DIMENSION THE DETAILED CAPPING SECTION OF THE EAST SIDE AS SHOWN ON SHEET C-24.
  2. DRAINAGE GEOCOMPOSITE DRAINAGE LAYER SHALL BE CREATED BY HEAT-BONDING GEOTEXTILE TO THE UPPER AND LOWER SIDES OF THE GEO-NET.

TYPICAL EAST SIDESLOPE  
COVER SYSTEM DETAIL  
N.T.S.

DELAWARE CITY REFINERY  
INDUSTRIAL WASTE LANDFILL CLOSURE

CONSTRUCTION DETAILS (SHEET 1 OF 3)

JOB NO.	20240421	SCALE:	N.T.S.
ORIGINAL DATE:	04/05/05	LAST REVISED:	09/30/10
DRAWING NO.		REV	3

C-60

PLAN CERTIFIED BY:	DATE
<b>URS</b>	07/01/2009
335 COMMERCE DRIVE, STE 300 FORT WASHINGTON, PA 19034 TEL: (215) 367-2500 FAX: (215) 367-1000	(Date)
(Signature)	
PETER J. DUDKO	
PROFESSIONAL ENGINEER DE LIC. NO. 9538	

PLANS ISSUED BY:	DATE
<b>URS</b>	09/30/10
335 COMMERCE DRIVE, STE 300 FORT WASHINGTON, PA 19034 TEL: (215) 367-2500 FAX: (215) 367-1000	

DESIGNED BY:	ETS	04/05/05
DRAWN BY:	SMR	02/03/06
CHECKED BY:	PAD	09/30/10
APPROVED BY:	JAC	09/30/10
CLIENT APPROVED BY:		